MIAMI-SOUTH FLORIDA
National Weather Service
Forecast Office
http://www.weather.gov/miami

RAINY SEASON SO FAR A TALE OF TWO COASTS
WET EAST, DRY WEST

July rainfall across South Florida closely resembled the rainfall patterns observed so far this rainy season. With the rainy season just past the halfway mark, rainfall since May 1st has exhibited a large variation from east to west across the south Florida peninsula (Figure 1). Totals mostly ranged from 25 to 35 inches over metro Southeast Florida (above normal), 15 to 25 inches over interior south Florida including the Lake Okeechobee area (near to above normal) and 12 to 18 inches over coastal and northern sections of Collier County as well as most of Mainland Monroe County (below normal).

The large east/west variation in the rainfall amounts can be attributed at least in part by prevailing and stronger-than-normal southwest winds in the lower to middle levels of the troposphere over south Florida (Figure 2). The effect of southwest winds over a prolonged period is to concentrate daily summer showers and thunderstorms over the eastern half of the peninsula, which in turn keeps areas along and near the southwest Florida Gulf coast relatively dry.

Another way of illustrating this difference is the historical ranking of the past three months of rainfall. Several eastern sites recorded their top-12 wettest May-July periods on record; among these Homestead General Airport (2nd wettest), Miami (5th wettest). Miami Beach (8th wettest), The Redland (9th wettest) and West Palm Beach (12th wettest). On the flip side, some interior and western locales recorded among the driest May-July periods on record (Immokalee 4th driest, Naples 5th driest, Canal Point 7th driest and Oasis Ranger Station 7th driest).

The rains of this wet season have mostly diminished the drought conditions from last winter; although abnormally dry conditions linger over portions of interior and coastal southwest Florida (Figure 3).

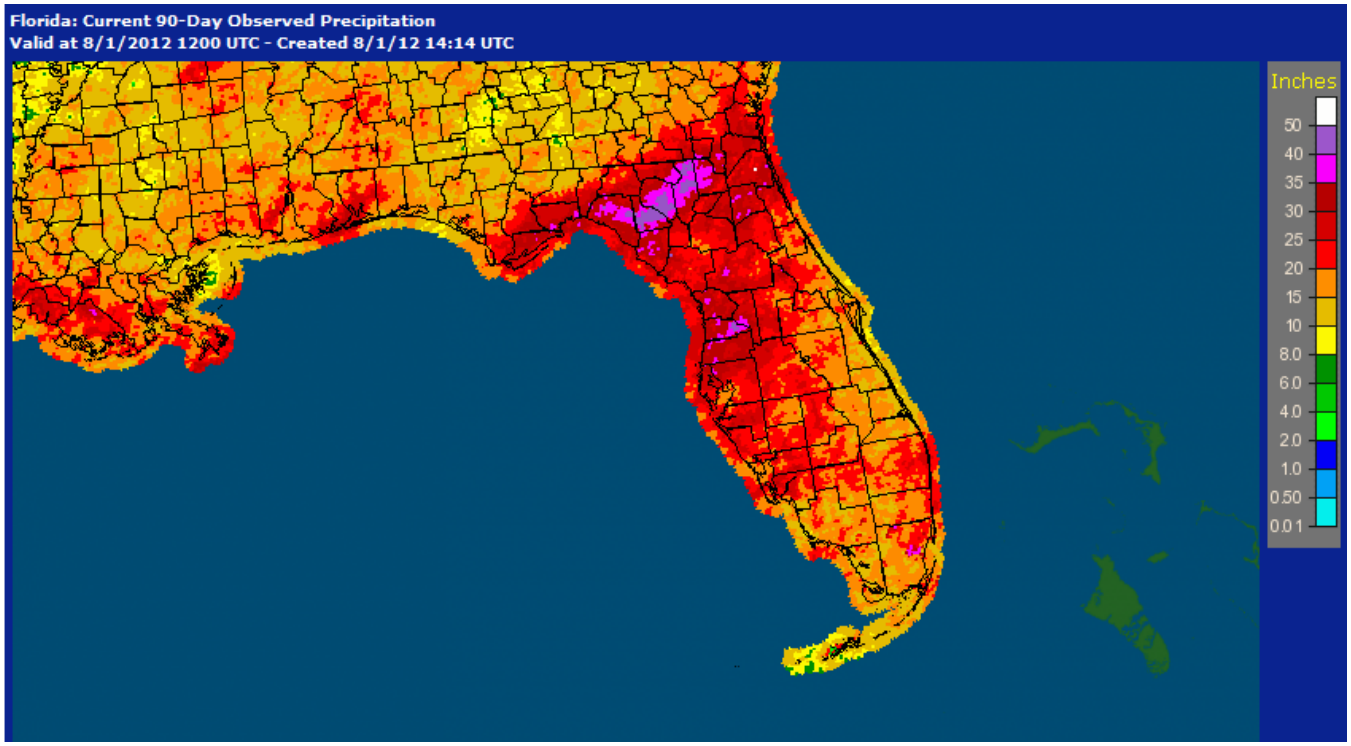

FIGURE 1: MAY-JULY 2012 PRECIPITATION.

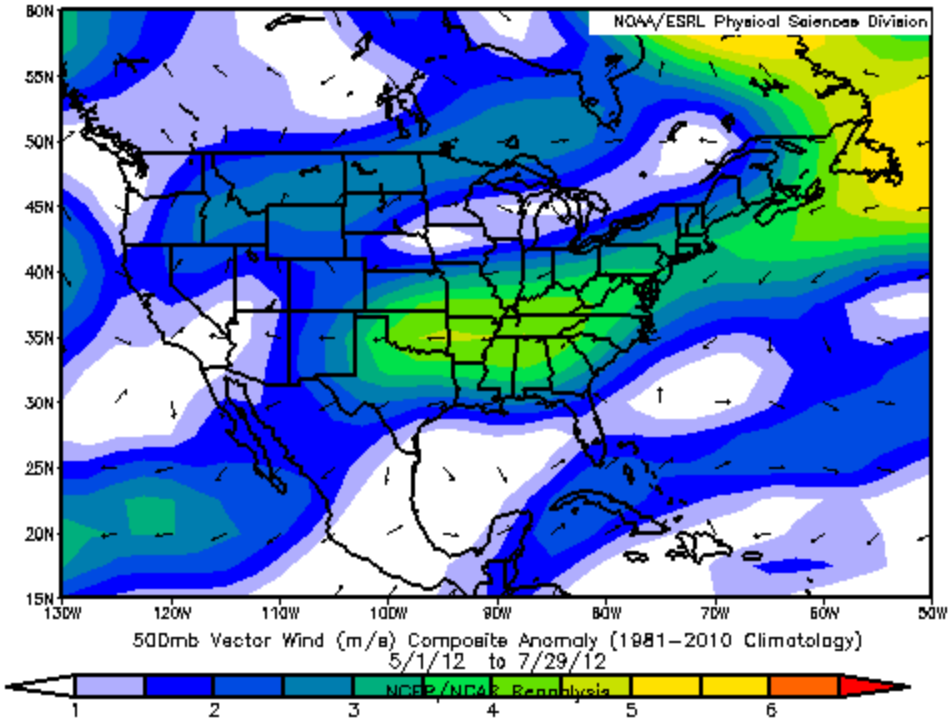

FIGURE 2: 500 MB WIND ANOMALIES FROM MAY 1-JULY 29, 2012. BLUE COLORS OVER SOUTH FLORIDA CORRESPOND TO STRONGER-THAN-NORMAL SOUTHWEST WINDS IN THE MID-TROPOSPHERE. .

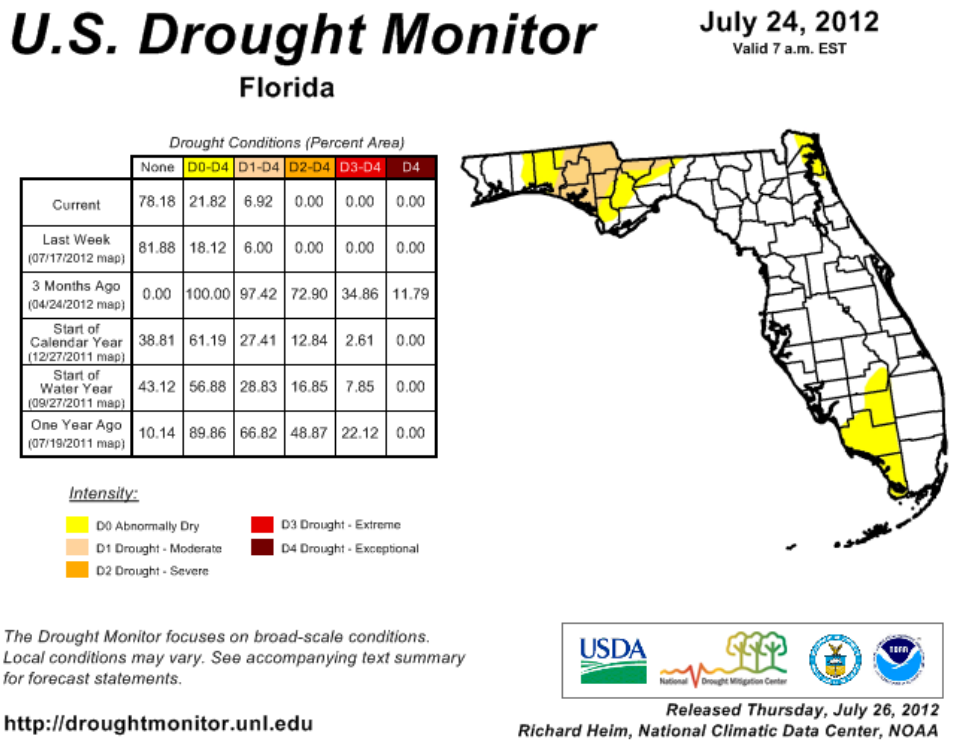

FIGURE 3: DROUGHT MONITOR AS OF JULY 26TH.

Below are May-July 2012 rainfall totals at select sites across South Florida. Rainfall values are listed in inches.

MAY-JULY 2012 RAINFALL TOTALS/DEPARTURE FROM NORMAL IN INCHES

Station – ***Beginning of Records***	**May-July 2012**	**Dep. from Normal (Rank)**
FORT LAUDERDALE – *1912*	24.56	+3.77
MIAMI – *1911*	36.15	+14.64 (5th wettest)
NAPLES – *1942*	11.26	- 7.99 (5th driest)
WEST PALM BEACH – *1888*	26.97	+8.40 (12th wettest)
BIG CYPRESS RES.	17.22	- 5.08
BRIGHTON RESERVATION	18.07	- 0.31
CANAL POINT - *1941*	12.68	- 5.59 (7th driest)
CAPE FLORIDA	26.22	+6.64

FORT LAUDERDALE BEACH	29.58	+9.34
HIALEAH	30.36	+5.05
HOLLYWOOD - *1963*	25.99	+4.13
HOMESTEAD GEN APT - *1990*	30.35	+8.29 (2nd wettest)
IMMOKALEE - *1970*	12.62	- 6.34 (4th driest)
JUNO BEACH	28.04	+8.61
LABELLE - *1929*	21.33	+0.82
MARCO ISLAND	12.67	-7.20
MIAMI BEACH - *1927*	25.52	+7.92 (8th wettest)
MOORE HAVEN - *1918*	24.32	+6.53 (15th wettest)
MUSE	23.48	n/a
NORTH MIAMI BEACH	30.94	+8.07
NWS MIAMI – FIU MAIN	40.05	+16.34
OASIS RANGER STN - *1978*	16.11	-7.36 (7th driest)
ORTONA	18.11	-3.37
PALM BEACH GARDENS	22.09	+2.93
THE REDLAND - *1958*	30.84	+8.63 (9th wettest)

NORMAL VALUES ARE THE 1981-2010 CLIMATIC AVERAGES, BUT ARE NOT AVAILABLE FOR ALL OBSERVING LOCATIONS.

TEMPERATURES

Increased cloud cover and rainfall played a big role in keeping temperatures near to slightly below normal during the May to July period, particularly eastern areas. Even along the Gulf coast where less rain has fallen, average temperatures during the same time period were near normal, at least in part due to the persistent onshore wind flow from the Gulf of Mexico which has also been running near normal from a surface temperature perspective. Data for the four main climate sites are below:

- **Miami** recorded an average May-July temperature of 81.9 degrees. This is 0.3 degrees below normal.

- **Fort Lauderdale** recorded an average May-July temperature of 81.5 degrees. This is 1.0 degrees below normal.

- **Naples** recorded an average May-July temperature of 81.1 degrees. This is right at the normal.

- **West Palm Beach** recorded an average May-July temperature of 80.7 degrees. This is 0.1 degrees below normal.

OUTLOOK AND HAZARDS

Long-range outlooks by the Climate Prediction Center for the period from August to October call for equal chances of above, below or near normal precipitation, along with an enhanced likelihood of warmer than normal temperatures. These are consistent with the wet season outlook issued in early May and is based on a combination of model forecasts and long-term trends. It must be emphasized, however, that long-range outlooks are **subject to large errors**.

August marks the beginning of the busiest part of hurricane season. South Florida has been directly hit by a total of 11 hurricanes in August going back to the late 1800s. Only October and September have had more hurricane strikes. Therefore, NOW is the time to make sure personal and business hurricane plans are in place and that you and your families are ready this hurricane season. Go to ready.gov for information and preparedness checklists.

August and September are also prime months for rip currents. Always swim near a lifeguard and heed the advice of Ocean Rescue personnel. Pay attention to flags posted at lifeguard stands which alert of the potential rip current danger.

For daily weather forecasts, watches, warnings and statements, please visit our web site at weather.gov/southflorida. We are also on Facebook and Twitter!